are almost in contact; the posterior eyes of the quadrilateral figure are the largest, and the anterior ones are the smallest of the eight. Cephalo-thorax rounded on the sides, compressed before, elevated and convex in the cephalic region, depressed behind, glossy, and of a very dark brown, colour, with a broad band in the middle, which decreases in breadth to its posterior extremity where it is yellowish white, the anterior part being yellowish brown. Falces powerful, conical, vertical, armed with teeth on the inner surface, and of a reddish brown colour, the base being the darkest. Maxillæ short, straight, enlarged and rounded at the extremity: lip semicircular, but somewhat pointed. These parts are of a very dark brown colour, their extremities being faintly tinged with red. ${ }^{\text {S Sternum }}$ heart-shaped, with small prominences on the sides, opposite to the insertion of the legs; its colour is brownish black. Legs moderately long, provided with hairs and a few fine spines; they are of a yellowish brown colour, the femora being marked with brown longitudinal streaks; the first pair is the longest, then the second, and the third pair is the shortest; each tarsus is terminated by the customary number of claws of the usual structure. The palpi are short and of a yellowish brown colour, the radial and digital joints being the darkest. Abdomen oviform, convex above, projecting greatly over the base of the cephalo-thorax; it is of a pale yellowish brown colour on the upper part, and is marked with four minute brown spots which form a quadrilateral figure whose anterior side is the shortest; a narrow, irregular, dark brown line extends along each side, from the anterior part, more than two-thirds of its length, and contiguous to the inferior margin of these lines, which are most distinct at their extremities, there is a parallel band of yellowish white; the sides are dark brown freckled with paler brown, and the under part is brownish black, bounded laterally by a yellowish white band extending from the anterior extremity beyond the spinners; the sexual organs are almost concealed by a scale-like process situated on each side of them. -The specimen of Epëira calva described above was taken in June at Interlacken.

> XI.-Note of the Mollusca observed during a short visit to the Canary and Madeira Islands, \&c., in the months of April and May 1852. By R. McAndrew, F.L.S.

On the 12th of March I sailed from Liverpool in a small yacht, on a voyage undertaken to benefit the health of some members of my family. We reached Lisbon after a boisterous navigation of ten days passed without any occurrence worthy of note, and
were afterwards, by a continuance of bad weather, detained in port till the end of the month. In addition to the species of land shells previously met with by me in the neighbourhood of Lisbon, such as Helix porentina, H. barbula, \&c., I obtained a Pupa the size of $P$. secalina, and a Testacellus. The weather only once permitted of my attempting to dredge, when I tried in deep water towards the south side of the Tagus, but got very little of anything. Nassa scalariformis was the only addition to my previous list from the locality. Cymba Olla is sold in the market of Lisbon, and doubtless eaten by the natives. We set sail from Lisbon on the 1st of April, and almost immediately after passing: the bar, began to observe numerous marine animals, such as Vellelle, Salpa (in chains), Portuguese men-of-war, \&c. In lat. $34^{\circ}$, and about fifty or sixty miles from the nearest land, a Loligo was brought on board by the patent log:-a similar circumstance occurred on another occasion further north, and at a still greater distance from land.
5th April. - Dredged two hauls at eight miles from the shore, off Mogador, depth 35 to 40 fathoms, bottom fine sand and mud.
Obtained twenty-two species of shells, all known inhabitants of the British seas, with the exception of the six following, viz. a Tellina, Venus undescribed, but previously dredged by me in Gibraltar Bay, Dentalium dentalis, Buccinum modestum, Ringuicula auriculata, and a Natica, species not ascertained. One of the species (Venus striatula) would hardly have been looked for so far south.
${ }^{20}$ We spent two days in the port of Mogador, during which a strong wind with a heavy surf coming into the harbour rendered landing inconvenient, and dredging all but impracticable; I managed however to work a little under the lee of the island which forms the harbour, by going very early each morning before the breeze freshened up. I had no opportunity of examining the shore of the main land-indeed only landed there once, but the country in the vicinity of the town was far from inviting presenting nothing but bare sand, rising behind into hills topped with a shrubby vegetation. The island, on the contrary, at the time of our visit was covered with a perfect carpet of flowers. The only land shells I could find there were-

Helix lactea.
aspersa.
pisana (the most abundant).
A Caracolla (white with pink inside).

Bulimus decollatus. acutus.
pyramidatus.

Of marine shells, between what were collected on the shore
and those dredged, I got ninety-eight species; of which fifty-four are common to the British seas, ninety are known to inhabit the Mediterranean, one (Psammobia rugosa) the south coast of Portugal, one (a Kellia or Galeomma, but genus not ascertained) the coasts of Algarve and Asturias, one (Marginella glabella) Senegal and the Canaries, five (two small Marginella, a Chiton, a Buccinum, and Mitra zebrina) I met with in the Canaries, and one (a Turbo) is new to me.

Laminaria are as abundantly developed in Mogador harbour as on our own coasts, the prevailing species apparently identical with the common tangle, but of a paler colour; numerous specimens of Patella pellucida are found upon it.

Two days' sail from Mogador brought us to Lancerote, one of the Canaries. Among these islands we spent exactly a month, which allowed time for only a partial examination of a small portion of the coasts of Lancerote, Grand Canary and Teneriffe, and I appropriated a full fortnight to the latter island. I have reason to think that Fuerteventura, and the smaller islands of Graciosa, Alegranza, and Monte Claro, which I did not visit, would have furnished results of greater interest.

The marine Mollusca described in the costly work of Webb and Berthelot on the Natural History of the Canaries, comprise) 138 species, of which eight are Cuttle-fishes, and six naked Mollusca, leaving 124 species of marine shells, of which a list was furnished to me by my friend Prof. Edw. Forbes. Of these I did not succeed in taking

Argonauta Argo.
Planaxis lævigata.
Conus betulinus, Prometheus and guinaicus.
Cymba Neptuni, porcina and proboscidalis.
Marginella lineata.
Cassis flammea and testiculus.
Cerithium nodulosum.
Murex trunculus.

Scissurella Berthelotii.
Mytilus elongatus.
Arca Noæ.
Cardium costulatum.
Cardita corbis.
Crassatella divaricata.
Lutraria rugosa.
Mitra ebenea.
Trochus, two or three species doubtful.

But as several of these are known African shells, and were received from fishermen, it is possible that some may have been obtained from the coast of Africa, the great Canarian fishingground.

Of six species of Hyalæa I only procured three.
Itronisiog 9
Of five species of Cleodora I only procured three. Of two species of Atalanta I only procured one.
Several of the species I have obtained are either new or not identified; but when they are all worked out and named, I reckon that my list of shells of the Canaries will include about 260 to

270 species, of which 100 are enumerated in the work referreds to, and 160 or 170 are new to the fauna of the district. 1 mon ITB

## List of Shells procured in the Canary Islands.





In the foregoing list the species marked $*$ were not found by myself, but given to me as native; those mentioned as "undescribed" I had previously obtained in the Mediterranean. nurs?

It is to be remarked that the genera Nucleus and Leda are not represented in the Canary or Madeira Islands.

Marginella glabella and $\}$ are common in Lancerote and Grand CaConus mediterraneus nary, but were not observed in the more westerly island of Teneriffe.
Of land and freshwater shells fifty-seven are enumerated in the work already referred to ;-of these I did not procure above half; they are generally of a peculiar and interesting character.

Of Vitrina I believe there are two species; one of them, the smaller, found under stones in dry situations; the other met with living in moist wood of laurel-trees not far from Laguna. An adult specimen of the animal measured fully $1 \frac{1}{2}$ inch in length when living. In the same locality I found dead a very thin, pellucid shell of a green colour, and carinated like a Caracolla. It differs from any that I am acquainted with.

On our way from Teneriffe to Madeira we landed for some hours on the Great Salvage, an island of about a mile in extent in either direction, uninhabited, except for a few weeks in the year, when it is visited for the collection of barilla, feathers, \&c.. 0

We found upon it a few goats, and rabbits in vast abundance, so that our people were able to catch some in their hands; also sea fowl, which quietly allowed themselves to be taken from underT the ledges of rock, and innumerable lizards. After diligent search I could only find one species of land mollusk, a snail allied to Helix pisana, but apparently distinct from it. On the rocks of the shore were Littorina striata, three or four species of Patella, and a Trochus, all of large size, and in great abundance.

16th May.-Arrived at Madeira: dredged three times in Funchal roads and once in the bay of Porto Santo : obtained

|  | cies. |
| :---: | :---: |
| Gastrochæna |  |
| Saxicava | 1 l . arctica. ersimot |
| Venerupis | 1 .. irus. |
| Neæra | 2 costulata, cuspidata. ansturrerit) |
| Poromya | 1 . . granulata. Mlamoluat |
| Lyonsia | 1 .. striata. |
| Thracia | 1 .. phaseolina. \| Brijita/ |
| Solecurtus | 2 .. candidus, coarctatus. |
| Tellina. | 5 (In .. depressa, distorta, donacilla, balaustina, and another. |
| Psammobia | 1 .. costulata. \|imiossd |
| Ervillia | 1 . . castanea. Мрап/. |
| Cytherea | 2 . . chione, and one undescribed. . whomel/ |
| Venus | 2.1. verrucosa and casina. |
| Circe | 1 .. minima. $1,7+1 /$ |
| Cardium | 5 ... echinatum, rusticum, papillosum, lævigatum, and another? |
| Cardita | 1 . calyculata. |
| Lucina | 4 .. spinifera, divaricata, pecten, and another. |


| Diplodonta .. 2 . . rotundata, apicalis. |  |
| :---: | :---: |
|  |  |
| Modiola . . . 1 |  |
|  |  |
| Pectuncu |  |
| Avicula |  |
| Lima |  |
| Pecten. | 9 .. maximus or Jacobæus, pusio, similis, coralloides, polymorphus, pes felis, opercularis?, gibbus, and another. |
| Ostrea . .f. . . . inmel 1 athlubl |  |
| Argiope .... 1 or 2 |  |
| Hyaæa ... ${ }_{\text {din }} 4$. . . tridentata, trispinosa, and two others. ${ }^{\text {an }}$ |  |
| Cuvieria |  |
| Chiton. |  |
| Patella |  |
| Dentalium |  |
| Fissurella.... $\quad 1 \quad$. ${ }^{\text {r }}$ reticulata. |  |
|  |  |
| Emarginula.. 2 |  |
| Trochus .... | 5 .. crenulatus, levigatus, ziziphinus, ma gus, and another. |
| Solarium . . . 1 |  |
| Bifrontia .... 1 .. $\begin{gathered}\text { zanclæa (operculum pyramidal, gra-l } \\ \text { duated). }\end{gathered}$ |  |
| Ianthina |  |
| Turbo ...... 1 .. ru |  |
| Phasianella | 1 .. pulla. |
| Rissoa...... 4 or 5 .. violacea, cimex, and |  |
| Cerithium .. 3 .. lima, adversum, and |  |
| Turritella .. 1 .. new? and one undesc |  |
| Scalaria .... 3 or 4 .. Turtoni, cochlea, and |  |
| Eulima .... 3 .. subulata, nitida, and |  |
| Chemnitzia .. 3 .. rufa, and two others. |  |
| Eulimella .. 1 .. scillæ. |  |
| Natica..... 2 .. porcellana ?, and anothe |  |
| Neritina | viridis |
| Cancellaria .. 1 .. undescribe |  |
| Murex .e.. . 3 . . corallinus |  |
| Cassis ...... 1 .. sulcosa |  |
| Buccinum .. 1 .. minus. |  |
| Nassa ...... 3 .. prismatica, incrassata, variabilis |  |
| Mangelia.... 5 or 6 .. teres, nana, Vauquelina, Ginniniana, and one or two others. |  |
| Mitra | 2 .. zebrina, littoralis? |
| Cyprea .... 2 .. pulex, candidula |  |
| Columbella.. 1 or 2 .. rustica, and one othe |  |
| Marginella .. 1 .. guancha ? |  |
| Ringuicula | auriculata. |


Cylichna .... 3 of ... cylindracea, and two others.dsdorq ors Amphispira. . ${ }^{\text {d }}$.
 Spataigus jfs botil Asterias ... Ditrupa

Of the foregoing species (about 125) 58 inhabit Britain, 98 to 100 the Mediterranean or coasts of Portugal (including, all the British species) ; of those remaining, 16 are common to the Ca naries, 1 (a Tellina) to Mogador, leaving 3 species of Rissoa, 2 of Emarginula, 1 of Scalaria, 2 of Argiope, and 1 of Turritella, supposed to be new.

The land shells of these islands having been well worked out by other parties, it is unnecessary to say anything upon them. I was much struck by their great abundance in the Dezertas and Porto Santo.

Beaumaris, July 5, 1852.

> ${ }^{2} \mathrm{XII}$.15 On some genera of the Icacinaceæ.
> By John Miers, Esq., F.R.S., F.L.S.

